

IMPLANTABLE MEDICAL DEVICES USING ZINC

ABSTRACT OF THE DISCLOSURE

Implantable medical devices using zinc, and methods therefore, provide one or more advantageous effects to a tissue. In one embodiment, at least one zinc-containing component is coupled with a stent via one or more zinc chelators to enhance resistance of the stent to plaque formation and in-stent restenosis. Elastin production may also be enhanced by devices coupled with zinc. Enhanced elastin production may be used, for example, to treat a blood vessel in a location at or near an aneurysm. In some embodiments, both elastin production and plaque resistance are enhanced. For example, zinc may be applied via a gel or other carrier substance to a venous graft for enhancing elastin and resisting plaque formation. Implantable devices coupled with zinc may provide improved results of medical and surgical procedures involving implantable devices, thus reducing the need for repeat procedures.

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